

In the Claims

Please amend the claims as detailed herein:

1. (Currently Amended) An antenna ~~structure~~ for an inductively coupled plasma generator with a chamber for processing an object received in the chamber with plasma, the antenna structure ~~having a powered end to which RF power is applied and a ground end connected to the ground, wherein at least two loop antenna elements are disposed electrically in parallel with each other, the powered ends and ground ends of the respective antennas are disposed symmetrically with respect to the center of the antennas, and the antennas crossing each other such that the powered ends and ground ends thereof are disposed at a part far from a chamber and central parts thereof are disposed at a part close to the chamber comprising:~~

a set of at least two loop antenna elements each having a powered end for applying radio frequency power thereto and a ground end for connecting to a ground, each of the loop antenna elements disposed adjacent to one another and in generally parallel relation with one another, each of the loop antenna elements having a lowered portion at a central area between the powered end and the ground end thereof such that the powered end and the ground end of each of the loop antenna elements are disposed at a location far from the chamber of the plasma generator and the lowered portion of each of the loop antenna elements are disposed at a location closer to the chamber.

2. (Currently Amended) The antenna ~~structure~~ according to claim 1, wherein the ~~respective antennas cross each other vertically~~ each of the loop antenna elements are disposed generally concentrically with one another and having an area crossing another one of the loop antenna elements in a generally vertical direction.

3. (Currently Amended) The antenna ~~structure~~ according to claim 1, wherein the ~~respective antennas concentrically cross each other horizontally~~ each of the loop antenna elements are disposed generally concentrically with one another and having an area crossing another one of the loop antenna elements in a generally horizontal direction.

4. (Currently Amended) An antenna ~~structure~~ for an inductively coupled plasma generator with a chamber for processing an object received in the chamber with plasma, wherein an internal antenna and an external antenna, each rectangular shaped, are parallel connected to each other, the internal antenna being installed such that two rectangular antenna elements are symmetrically superposed in two-ply loops, and the external antenna being installed such that four L-shaped antenna elements, each having two sides, are symmetrically disposed in two-ply loops, and wherein each powered end is disposed farthest from the chamber and each ground end is disposed near to the chamber.

5. (New) The antenna according to claim 1, wherein the powered end and the ground end of each of the loop antenna elements are disposed adjacent to each other.

6. (New) The antenna according to claim 5, wherein the antenna includes two loop antenna elements, and the powered end and the ground end of one of the loop antenna elements are disposed at an angular interval of 180° to the powered end and the ground end of the other one of the loop antenna elements.

7. (New) The antenna according to claim 5, wherein the antenna includes three loop antenna elements, and the powered end and the ground end of one of the loop

antenna elements are disposed at an angular interval of 120° to the powered end and the ground end of the others of the loop antenna elements.

8. (New) The antenna according to claim 1, wherein each of the loop antenna elements has a circular shape.

9. (New) The antenna according to claim 8, further including another set of at least two loop antenna elements of circular shape, each loop antenna element of the another set having a lowered portion at a central area between the powered end and the ground end thereof such that the powered end and the ground of each of the loop antenna elements are disposed at a location far from the chamber of the plasma generator and the lowered portion of each of the loop antenna elements are disposed at a location closer to the chamber, the loop antenna elements of the another set having a size smaller than the loop antenna elements of the first set and disposed concentrically within the loop antenna elements of the first set.

10. (New) The antenna according to claim 1, wherein each of the loop antenna elements has a rectangular shape.

11. (New) The antenna according to claim 10, further including another set of at least two loop antenna elements of rectangular shape, each loop antenna element of the another set having a lowered portion at a central area between the powered end and the ground end thereof such that the powered end and the ground of each of the loop antenna elements are disposed at a location far from the chamber of the plasma generator and the lowered portion of each of the loop antenna elements are disposed at a location closer to the chamber, the loop antenna elements of the another set

having a size smaller than the loop antenna elements of the first set and disposed concentrically within the loop antenna elements of the first set.